

REMARKS

Claims 1-14 were pending in this application prior to this amendment. Claims 1-14 were rejected in the Office Action dated 2 December 2002 (the "Office Action"). Applicants have amended claims 1-13, cancelled claim 14 and added claim 15-18 in order to more particularly and completely claim the present invention. No new matter has been introduced. Allowance of claims 1-13 and 15-18 is respectfully requested.

In the Office Action, the Examiner rejected claim 14 under 35 U.S.C. 112, second paragraph, noting that it was an omnibus type claim. Claim 14 is cancelled without prejudice.

In the Office Action, the Examiner rejected claims 4-5 and 9 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 has been amended such that the term "surface" no longer lacks antecedent basis in claim 4.

Claim 5 has been amended and no longer contains the term "casing surface."

Claim 9 has been amended and no longer contains the term "well fluids."

In the Office Action, the Examiner rejected claims 1-4, 9 and 13 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,443,228 to Aronstam et al. (hereinafter "Aronstam"), and rejected claims 5-8 and 10-12 under 35 U.S.C. 103(a) as being unpatentable over Aronstam.

Applicants submit herewith a declaration of Mr. William L. Wang under 37 CFR 1.132 establishing conception of the invention of the subject matter of claims 1-11 and 13 on or before 17 May 1999 which is prior to the effective date of Aronstam. As the priority application for the present patent application was duly filed in the UK Patent Office on 14 July 1999, it is hereby submitted that the invention of claims 1-11 and 13 are entitled to a date of invention at least as early as 17 May 1999. Thus, the applicants respectfully submit that Aronstam should be withdrawn as a prior art reference as to those claims.

With respect to claim 12, it is respectfully submitted that Aronstam does not render this claim obvious. The encryption recited in claim 12 is nowhere taught or suggested in Aronstam, and the examiner has not provided any teaching or suggestion or motivation in the prior art for modifying Aronstam. Thus it is respectfully submitted that the obviousness rejection of claim 12 be withdrawn as based on improper hindsight.

In the Office Action, the Examiner rejected claims 1-4, 6, 8-11 and 13 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,241,028 to Bijleveld et al. (hereinafter "Bijleveld"), and rejected claims 5, 7 and 12 under 35 U.S.C. 103(a) as being unpatentable over Bijleveld.

The present invention is directed to a technique for communicating data representing downhole measurements to the surface. Measurements are taken by a sensor positioned downhole, such as on a downhole robot, wireline or installed in the wellbore casing. Data from the sensor(s) are then transferred to separable passive data receptors. As stated in the specification at page 2 lines 15-21:

The separable elements act as passive receptors for data acquired from the sensing means, and in this way, an autonomously powered device can be sent downhole and left in place while data is transferred to the surface over time by sending the separable elements back to the surface, so extending the useful lifetime of the sensing apparatus.

Thus, it is clear from the specification that the data receptors are passive in that they do not include the sensor or sensor means. This passive nature of the data receptors has a number of important advantages including for example, simplicity of design, robustness in the downhole environment, small size, and buoyancy control.

In contrast, Bijleveld does not teach or suggest such passive data receptors - on the contrary, Bijleveld discloses much more complex devices which include sensors and other functionality.

In particular, it is clear from Figures 2 and 4 of Bijleveld and the associated text, that the devices which flow up to the surface include sensors. Indeed, Bijleveld refers to the devices specifically as "sensing devices" throughout the description. It is also noted that, in addition to the active sensors thought in Bijleveld, the reference also teaches that the sensing

devices include navigation means such as an accelerometer, a power supply such as a battery, and a data processor. Thus it is clear from the description of Bijleveld that the reference does not teach or suggest using passive data receptors for transmitting data from downhole to the surface.

In light of the above amendments and remarks, applicant believes that the present application and claims 1-13 and 15-18 are in proper condition for allowance. Such allowance is earnestly requested. If the Examiner is contemplating any action other than allowance of all pending claims, the Examiner is urged to contact Applicant's representative, Mr. William Wang, in the United Kingdom at 011-44-1223-325268.

Respectfully submitted,



William L. Wang
Registration No.: 39,871

Schlumberger Doll Research Center
36 Old Quarry Road
Ridgefield, CT 06877-4108
Phone: 203 431 5506
Fax: 203 431 5640